

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF)
ROY FODE; IVAN COLE; DOUG COLE;)
FRANK P. SHINN, JR. and)
HARRY MASTO,)

Appellants,)

v.)

STATE OF WASHINGTON,)
DEPARTMENT OF ECOLOGY; and)
TOM AND NANCY O. POWERS,)

Respondents.)

PCHB Nos. (803) and 803-A

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

This matter, the appeal of five ground water permits issued by the State Department of Ecology (hereinafter "Department") to Tom and Nancy O. Powers, came in a formal hearing before the Pollution Control Hearings Board by way of a stipulated record. The parties, through their attorneys, formally stipulated and an order was thereafter entered approving such stipulation that the evidence considered in PCHB No. 711, 728, 729, 730, and 759 may be incorporated into this record and any further evidence was to be made by affidavits subject to objection or

1 cross-examination. No objection or cross-examination was requested on
2 or before September 12, 1975, the last date by which any objections or
3 demand could have been made.

4 Appellants Fode, I. Cole and D. Cole previously stipulated to the
5 Board's Findings and Conclusions in PCHB No. 613 and thereby did not
6 actively participate in this hearing; appellants Shinn and Masto appeared
7 through their attorney, John M. Moberg; respondent Department of Ecology
8 appeared through Wick Dufford, Assistant Attorney General; and respondents
9 Powers appeared by and through their attorney, Lawrence L. Tracy.

10 From the transcripts read, affidavits examined, and briefs
11 considered, the Pollution Control Hearings Board makes these

12 FINDINGS OF FACT

13 I.

14 Under the geographical area involved in this matter there are
15 prehistoric layers of permeable basalt rock to a depth of at least
16 4,500 feet formed by successive lava flows. The layers form pockets in
17 which ground water aquifers have formed. In 1943, with the construction
18 of Grand Coulee Dam, the Columbia Basin Project was formed to develop an
19 irrigation system for agricultural development.

20 The Columbia Basin Project never has provided irrigation canal
21 water to the geographical area involved in this matter. The easternmost
22 canal of the project, the East Low Canal, lies to the west of the instant
23 geographical area.

24 II.

25 The instant geographical area historically was known as one where
26 dry-land farming was practiced. But in the early 1960s, probably as a

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1 result of commingling of irrigation water seepage from areas to the
2 west with natural water aquifers, the instant geographical area
3 experienced a rise in its water table.

4 Farmers found it financially feasible to drill for water and, thus,
5 increase their crop yields by sprinkler irrigation. Respondent's
6 predecessor agency issued 150 ground water well permits for irrigation
7 and, by 1966, it was obvious, from a declining water table, that there
8 could be an overissue of water withdrawal permits.

9 III.

10 In response to the above-described situation, the Department
11 promulgated WAC 508-14-010 and -020 on May 15, 1967. These regulations
12 established certain management areas and interim rules under which
13 ground water applications would be banned, limited or granted pending a
14 study by the Department of the source, extent, depth, volume and flow
15 of the ground waters.

16 In 1968, pursuant to the above, the Department closed an area
17 (called the "Odessa Hold Area") of about 1,100 square miles lying east
18 of the East Low Canal and including the instant geographical area to the
19 granting of ground water withdrawals. The Department agreed to accept
20 applications on a priority time basis but announced it would not process
21 them until completion of the aforementioned study.

22 IV.

23 To provide a foundation for the Department's water management
24 program detailed studies were initiated by it to investigate water
25 measurement techniques, reasonable pump lifts, and to develop a functional
26 ground water model.

1 One part of the study, calculated to measure the level of water in
2 the aquifer and hence the availability of water for appropriation,
3 resulted in the completion in 1971 (by the United States Geological
4 Survey) of a mathematical model for the Odessa and other areas of the
5 Columbia Basin. The model enables a computer to produce ground water flow
6 and aquifer water level information when water is subtracted by pumping
7 or added by recharge. Its results have been field measured and its
8 accuracy verified for the Odessa Sub-Area related to the instant appeals
9 as late as January and February, 1973. The model was based on the
10 accumulation of water data over four years ending in 1970.

11 Another phase of its study, was directed at gathering information
12 relating to the restraints of RCW 90.44.070, and was undertaken by the
13 State of Washington Water Research Center, the results of which were
14 embodied in October, 1971 in respondents' Exhibit 20 (PCHB 613) entitled
15 "Long-Run Costs and Policy Implications of Adjusting to a Declining Water
16 Supply in Eastern Washington". The purpose of the study was to develop
17 economic and cost data in order that the Department could determine a
18 "reasonable or feasible pumping lift in case of pumping developments"
19 (RCW 90.44.070).

20 As the result of the completion of such studies and based thereon
21 the Department adopted WAC 173-128 (establishing the Odessa Ground-Water
22 Management Sub-Area) on January 15, 1973 and WAC 173-130 (Odessa Ground-
23 Water Sub-Area Management Policy) on January 25, 1974, both of which
24 cover the geographical area of the instant appeals, and began to process
25 on a time priority basis, as filed, those ground water applications it
26 had been holding since 1968.

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V.

The policy of the Department provides for a limited controlled rate of decline of the water level in "Zone A", (which is the area of the instant appeals) to a total amount of 30 feet in three years (WAC 173-130-060) and to prevent the water table (static water level) from descending more than 300 feet beneath the altitude of the static water level, as measured in 1967. (WAC 173-130-070) In 1967 the static water level was 400 feet below the average ground level in the Sub-Area. Thus, by the granting of additional water rights, and the appropriation thereof, the water level (as that term is used in WAC 173-130-030(4)) will ultimately be allowed by the Department to decline to 700 feet below the earth's surface.

The point at which water is drawn into a pump is known as the pumping level. This point must be submerged when the pump is drawing water. The pumping level is always located below the surface of the water.

Appellants are prior water appropriators and, as a result of the issuance of new permits to others, will ultimately be required to expend substantial sums of money for well and well appurtenance improvements and additional operating costs to enable them to pursue and appropriate the amounts of water to which they have a prior right. However, the Department's regulations prevent junior appropriators (respondents) from withdrawing ground water when the static water level reaches the said 700 feet. On or before the time that the 700 foot static water level is reached, appellants will be required to pump from a point below that depth. But based upon respondents' Exhibit 20 (PCHB 613) and the testimony of Doctor Walter R. Butcher we find that

1 allowing the static water level to decline to 700 feet, at the maximum
2 rate of controlled decline of 30 feet in three years will not result
3 in an unreasonable pumping lift for the appellants.

4 As new permits are issued under such state policy, the waters which
5 have been stored in the aquifers will be depleted within 35 years, but
6 after the 700 foot level has been reached, and pumping by junior
7 appropriators is curtailed, water will continue to seep into the aquifer
8 to provide a sustained yield of water for the foreseeable future for
9 those remaining senior appropriators.

10 VI.

11 The cost study received by respondents' Exhibit 20 (PCHB 613) was
12 based upon price-market data of a five year time period ending in 1971.
13 Since then both the prices which the farmer pays and at which he sells
14 his product have increased. The prices at which a farmer sells his
15 product are still valid and they constitute the latest presently avail-
16 able information on that subject.

17 VII.

18 Any new well which is developed and operating within one and one-half
19 miles of another existing well may have a drawdown effect on the water
20 table of an existing well and vice versa. The degree of drawdown is
21 dependent upon factors which include such things as transmissivity
22 (the ability of rock to allow water to move through it), well efficiency,
23 the rate at which water is removed, and the amount of water removed.

24 VIII.

25 Appellant Shinn, a well driller and irrigation systems specialist
26 with 26 years of experience in the Moses Lake area, owns 500 acres of

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1 farmland serviced by three ground water wells upon which he has rights
2 prior in time to all respondents.

3 Appellant Masto, owns farmlands serviced by eight ground water wells
4 upon which he has rights prior in time to all respondents. In 1974,
5 during the height of the crop irrigation season, all of his wells
6 experienced a steadily declining amount of water production. The cause
7 of the lowering of the water production was the declining water table
8 level which has occurred in the area.

9 IX.

10 The Department granted respondents' applications for wells since
11 they were found by the Department to have water available for a
12 beneficial use and that they would not impair existing rights or be
13 detrimental to public welfare. Appellants contend the new wells of
14 respondents will adversely effect those of appellants by lowering the
15 pumping level to an unreasonable level.

16 X.

17 Appellants were unable to prove that the proposed wells of
18 respondents Tom and Nancy Powers would affect the water pumping level
19 of any of their wells. At any event, the amount of water withdrawal
20 contemplated by the combined permits of respondent (12,000 gallons per
21 minute by stipulation of respondents) will be within the water table
22 decline permitted by the provisions of WAC 173-130. The cumulative
23 effect of respondents' wells will be to reduce the static water level
24 of all wells, including appellants' wells.

25 XI.

26 The only evidence of the economic reasonableness of the pumping

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1 lift which will be generally required as a result of the implementation
2 of respondent's policy and regulations is contained in respondents'
3 Exhibit 20 (PCHB 613). However, as that exhibit relates, "what is
4 'feasible' or 'economic' or 'reasonable' to one water user may not apply
5 at all in another case." (page 102 of respondents' Exhibit 20)

6 Appellants failed to establish that the pumping lift, as to them,
7 would be unreasonable or not feasible.

8 XII.

9 The Department made an error in the computation of the available
10 water in the Sub-Area by inadvertently leaving out the annual withdrawal
11 of 117,000 acre-feet of water being pumped prior to January 1, 1974.
12 But this error was not shown to materially affect the permits on appeal
13 in these matters. Appellants also did not show that the effect of the
14 admitted error would cause the water table to decline in excess of that
15 permitted by WAC 173-130. The Department recognizes that certain areas
16 will have to be withdrawn, but again, it is of no concern in these
17 matters.

18 XIII.

19 Any Conclusion of Law hereinafter stated which is deemed to be a
20 Finding of Fact is hereby adopted as such.

21 From these Findings the Pollution Control Hearings Board comes
22 to these

23 CONCLUSIONS OF LAW

24 I.

25 Appellants do not question that the water permits issued to

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1 respondents are for a beneficial use. Rather, appellants attack the
2 issuance of permits to respondents on the ground that such appropriation
3 of water would impair existing rights or be detrimental to the public
4 welfare (see RCW 90.44.060 which governs ground water but adopts
5 provisions of RCW 90.03.290 relating to surface waters).

6 II.

7 It is true that appellants' rights, whatever they may be, precede
8 those of respondents'. Thus, the relevant question is whether appellants'
9 existing certificated water rights will be impaired by the regulations of
10 the Department, i.e., WAC 173-130, and the issuance of permits to
11 respondents pursuant thereto, the effect of which will be to lower the
12 pumping level of appellants' wells.

3 We conclude that the existing rights of appellants will not be
14 impaired.

15 III.

16 None of the permits of respondents, individually or collectively,
17 nor WAC 173-130 violate RCW 90.44.070 which provides:

18 No permit shall be granted for the development or withdrawal
19 of public ground waters beyond the capacity of the underground
20 bed or formation in a given basin, district, or locality to
yield such water within a reasonable or feasible pumping lift
in case of pumping developments

21 We conclude that the Department's limited and controlled rate of
22 water level decline, as expressed in its rule and regulation, provides
23 generally for a reasonable or feasible pumping lift. We recognize that
24 economics must be given weight in construing the meaning to be given
25 to the statutory terms "reasonable", or "feasible". However, we have
26 found as a fact in Finding of Fact XI that appellants did not prove

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1 facts which, as to them, might have established economic unreasonable-
2 ness. Even had they done so, we would nonetheless conclude that
3 RCW 90.44.060 must be interpreted as a prohibition only when the pumping
4 lift becomes unreasonable or not feasible as to "pumping developments"
5 generally.

6 With the world-wide shortage of food and the specter of hunger
7 becoming evermore acute, the public interest demands that underground
8 waters be utilized (and thus not wasted) in order to convert arid lands
9 into the production of food. That would result in a small step in the
10 fulfillment of *Isaiah 35:1: The desert shall rejoice and blossom as the*
11 *rose.*

12 Assuming, but not concluding, that appellants have a property right
13 in the level of the water table, their remedy may be to seek damages
14 against the State of Washington.

15 IV.

16 The permits issued by respondent are consistent, and not in conflict,
17 with RCW 90.44.060, 90.44.070 and 90.44.130. Therefore the permits of
18 respondents should be upheld.

19 V.

20 The statutes and regulations are presumed not to violate either the
21 Washington State or United States Constitutions.

22 VI.

23 Any Finding of Fact which should be deemed a Conclusion of Law is
24 hereby adopted as such.

25 From these Conclusions the Pollution Control Hearings Board issues
26 this

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ORDER

The action and findings of the Department and its issuance of the permits to respondents are affirmed; however, the matter is remanded to the Department to amend the permits to reflect the maximum gallons per minute and maximum acre-feet per year for each well as would meet the terms of their stipulation.

DATED this 20th day of January, 1976.

POLLUTION CONTROL HEARINGS BOARD

Chris Smith
CHRIS SMITH, Chairman

W. A. Gissberg
W. A. GISSBERG, Member

Walt Woodward
WALT WOODWARD, Member

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